REMARKS

Responsive to the Office action mailed October 16, 2008, applicants request entry of the foregoing amendments, consideration of the following remarks and reconsideration of the rejections set forth in said office action.

Claim 4-11 and 17-20 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. More particularly, claim 4-11 and 17-20 were rejected as not setting forth any steps involved in the method/process. Claims 17-20 have been canceled and claim 4-11 amended. Applicants submit that as amended, claims 4-11 set forth methods of (co)polymerization of at least one monomer which can be polymerized by the radical route under bulk, solution, emulsion, suspension or miniemulsion conditions comprising a step of reacting at least one monomer with alkoxyamines of the specified formula. As amended, claims 4-11 set forth a method comprising a specified step of reacting at least one monomer and an alkoxyamine of the specified formula.

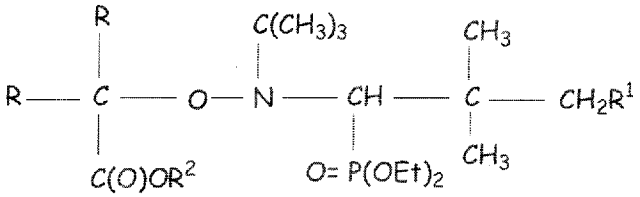
Claim 4-11 and 17-20 were rejected under 35 USC 101 as reciting a use without setting forth any steps involved in the process. Claims 17-20 have been canceled and claim 4-11 amended. Applicants submit that as amended, claims 4-11 set forth methods of (co)polymerization of at least one monomer which can be polymerized by the radical route under bulk, solution, emulsion, suspension or miniemulsion conditions comprising a step of reacting at least one monomer with alkoxyamines of the specified formula. As amended, claims 4-11 set forth a method comprising a specified step of reacting at least one monomer and an alkoxyamine of the specified formula.

Claims 1 was rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,569,967 (Couturier et al. '967). More specifically, it was argued that Couturier et al. '967,

while not disclosing the claimed compounds, disclosed analogous compounds such as compounds of claim 1 in which R^2 was an alkyl group of 1-6 carbons. Applicants respectfully submit that Couturier et al. '967 fails to anticipate or render obvious claim 1 as currently amended.

Claim 1, as well as independent claims 4 and 12, has been amended to limit R^2 to a hydrogen atom, a phenyl radical, an alkali metal, H_4N^+, Bu_4N^+ or Bu_3HN^+. The alkali metal can be Li, Na or K (new claims 21-23). Applicants submit that Couturier et al. '967 fails to provide any disclosure of compound analogous to those of claims 1, 4 and 12 as amended.

The present invention is directed toward unique alkoxyamines derived from β-phosphorated nitroxides and their use as initiators for polymerizations or copolymerizations of at least one monomer which can be polymerized by the radical route. The alkoxyamines of the present invention are of the formula:



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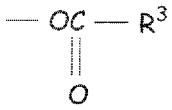
in which R represents a linear or branched alkyl radical having a number of carbon atoms ranging from 1 to 3, R^1 represents a hydrogen atom or a residue:



in which R^3 represents a linear or branched alkyl radical having a number of carbon atoms ranging from 1 to 20, and R^2 represents a hydrogen atom, a phenyl radical, an alkali metal, such as Li, Na or K, H_4N^+, Bu_4N^+ or Bu_3HN^+, exhibiting a kinetic dissociation constant kd, measured at 120°C by EPR, of greater than 0.05 s^{-1} and preferably of greater than 0.1 s^{-1}.

Applicants submit that Couturier et al. '967 fails to anticipate or render obvious the unique alkoxyamines of the present invention or their use in polymerisations via the radical route. The examples of the present application, such as examples 2, 3 and 5-9, show the advantages of the alkoxyamines of the present invention as initiators for polymerizations in that they allow for enhanced control of the polymerization process and enhanced control over the polydispersity of

the polymers produced.

Applicants submit that Couturier et al. '967 fails to disclose or render obvious alkoxyamines of the present invention wherein R^2 is a hydrogen atom, a phenyl radical, an alkali metal, such as Li, Na or K, H_4N^+, Bu_4N^+ or Bu_3HN.

Claims 2-20 were rejected under 35 USC 103(a) as being unpatentable over Couturier et al. '967 in view of US Patent No. 5,763,548 (Matyjaszewski et al. '548). Claim 17-20 have been cancelled. Applicants submit that amended claims 2 and 3 depend from claim 1 and, as discussed above, claims alkoxyamines compounds that are neither anticipated nor render obvious by Couturier et al. '967. Applicants submit that the teaching of Matyjaszewski et al. '548 that brominated carboxylic esters are equivalent in function to brominated carboxylic acids for an ATRA process, when combined with the disclosure of Couturier et al. '967 fails to anticipate or render obvious the specific alkoxyamines of the present invention.

Claims 4-11 as amended are directed towards a method for (co)polymerising monomers with the specific alkoxyamines claimed in claims 1-3. Applicants submit that the teaching of Matyjaszewski et al. '548 that brominated carboxylic esters are equivalent in function to brominated carboxylic acids for an ATRA process, when combined with the disclosure of Couturier et al. '967 fails to anticipate or render obvious the methods of the present invention which use the specific alkoxyamines.

Claims 12-16 are directed to (co)polymers obtained via a method of (co)polymerising monomers with the specific alkoxyamines claimed in claims 1-3. Applicants submit that the teaching of Matyjaszewski et al. '548 that brominated carboxylic esters are equivalent in function to brominated carboxylic acids for an ATRA process, when combined with the disclosure of Couturier et al. '967 fails to anticipate or render obvious the methods of the present invention which use the specific alkoxyamines.

In view of the foregoing remarks, applicant respectfully submits that claims 1-16 and 21-23 of the present application are in condition for allowance and prompt favorable action is solicited.

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Respectfully submitted,

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